

ABSTRACT OF THE DISCLOSURE

A shape memory material with integrated actuation using embedded particles. One embodiment provides a shape memory material apparatus comprising a shape memory material body and magnetic pieces in the shape memory material body. Another embodiment provides a method of actuating a device to perform an activity on a subject comprising the steps of positioning a shape memory material body in a desired position with regard to the subject, the shape memory material body capable of being formed in a specific primary shape, reformed into a secondary stable shape, and controllably actuated to recover the specific primary shape; including pieces in the shape memory material body; and actuating the shape memory material body using the pieces causing the shape memory material body to be controllably actuated to recover the specific primary shape and perform the activity on the subject.